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FIG. 1
(Prior Art)

100

<?xml version="1.0" ?>

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

<!-- *****
<!-- The root element defines a person.
<!-- *****

110 <xsd:element name="person" type="personType"/>

<xsd:complexType name="personType" mixed="false">

<xsd:all>

<xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1" />

<xsd:element name="address" type="xsd:string" minOccurs="1" maxOccurs="1" />

</xsd:all>

<xsd:attribute name="height" type="xsd:integer" use="optional" />

<xsd:attribute name="weight" type="xsd:integer" use="optional" />

</xsd:complexType>

</xsd:schema>

FIG. 2 (Prior Art)

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<?xml version="1.0" encoding="UTF-8"?>

<person

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://www.myCompany.com/base.xsd"

height=72 weight=190>

<name>John</name>

<address>123 Main Street</address>

</person>

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FIG. 3A
(Prior Art)

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```

<?xml version="1.0"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <!-- ***** ^
  <!-- This extension adds gender to a person. ^
  <!-- ***** ^
  <xsd:redefine schemaLocation="base.xsd">
    <xsd:complexType name="personType">
      <xsd:complexContent>
        <xsd:extension base="personType">
          <xsd:attribute name="gender" type="xsd:string" use="optional" />
        </xsd:extension>
      </xsd:complexContent>
    </xsd:complexType>
  </xsd:redefine>
</xsd:schema>

```

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FIG. 3B
(Prior Art)

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```

<?xml version="1.0" ?>

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

  <!-- ***** ^
  <!-- This extension adds age to a person. ^
  <!-- ***** ^

  340 <xsd:redefine schemaLocation="base.xsd">

    {
      350 <xsd:complexType name="personType">
        <xsd:complexContent>
          351 <xsd:extension base="personType">
            352 <xsd:attribute name="age" type="xsd:integer" use="optional" />
            353 </xsd:extension>
          </xsd:complexContent>
        </xsd:complexType>
      </xsd:redefine>
    }
  </xsd:schema>

```

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FIG. 3C
(Prior Art)

360
<?xml version="1.0" ?>

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

 <!-- *****
 <!-- This extension adds marital status to a person.
 <!-- *****

 <xsd:redefine schemaLocation="base.xsd">

 <xsd:complexType name="personType">
 <xsd:complexContent>
 <xsd:extension base="personType">
 <xsd:attribute name="maritalStatus" type="xsd:string" use="optional" />
 </xsd:extension>
 </xsd:complexContent>
 </xsd:complexType>
 </xsd:redefine>
</xsd:schema>

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FIG. 4A (Prior Art)

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```
<?xml version="1.0" encoding="UTF-8"?>
<person
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="//www.myCompany.com/ext1.xsd"
  height="72" weight="190" gender="M">
  <name>John</name>
  <address>123 Main Street</address>
</person>
```

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FIG. 4B (Prior Art)

430

```
<?xml version="1.0" encoding="UTF-8"?>
<person
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="//www.myCompany.com/ext2.xsd"
  height="72" weight="190" age="35">
  <name>John</name>
  <address>123 Main Street</address>
</person>
```

440

FIG. 4C (Prior Art)

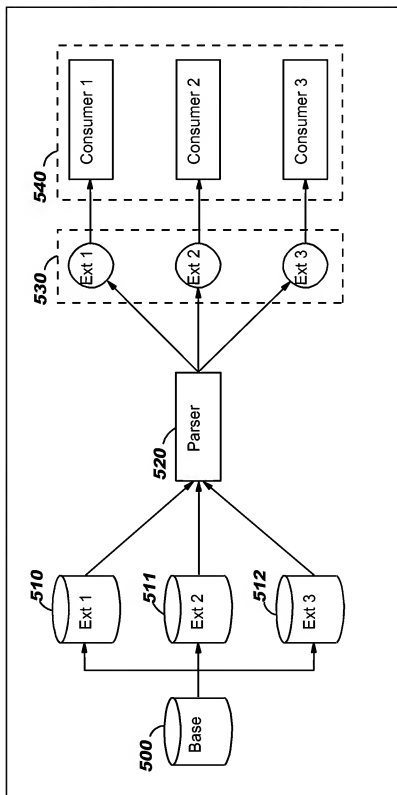
460

```
<?xml version="1.0" encoding="UTF-8"?>
<person
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="//www.myCompany.com/ext3.xsd"
  height="72" weight="190" maritalStatus="Single">
  <name>John</name>
  <address>123 Main Street</address>
</person>
```

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FIG. 5
(Prior Art)



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FIG. 6
(Prior Art)

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```

<?xml version="1.0" ?>

<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">

<!-- *****-->
<!-- The root element defines a person. -->
<!-- *****-->

<xsd:element name="person" type="personType"/>

<xsd:complexType name="personType" mixed="false">
<xsd:all>
<xsd:element name="name" type="xsd:string" minOccurs="1" maxOccurs="1" />
<xsd:element name="address" type="xsd:string" minOccurs="1" maxOccurs="1" />
</xsd:all>
<xsd:attribute name="height" type="xsd:integer" use="optional" />
<xsd:attribute name="weight" type="xsd:integer" use="optional" />
<xsd:attribute name="gender" type="xsd:string" use="optional" />
<xsd:attribute name="age" type="xsd:integer" use="optional" />
<xsd:attribute name="maritalStatus" type="xsd:string" use="optional" />
</xsd:complexType>
</xsd:schema>

```

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FIG. 7
(Prior Art)

700

```
<?xml version="1.0" encoding="UTF-8"?>
<person
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="//www.myCompany.com/ext3.xsd"
  height="72" weight="190" gender="M" age="35"
  maritalStatus="Single">
  <name>John</name>
  <address>123 Main Street</address>
</person>
```


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FIG. 8
(Prior Art)

